

ABSTRACT

It is intended to provide a method of reducing the total amount of stored protein, to develop a technique required therefor, and to provide a plant and its seeds developed by the above method and a method of using such a plant and seeds. More specifically, a nucleic acid molecule containing a consecutive nucleic acid sequence of at least 15 in length which is complementary with a nucleic acid sequence encoding prolamin polypeptide or a nucleic acid sequence having a homology of at least about 70% to the complementary nucleic acid sequence having at least 15 nucleotide length. A method of reducing the expression dose of a protein in a seed of a plant which comprises: A) the step of providing the above-described nucleic acid molecule; B) the step of transferring the nucleic acid molecule into the cells of the plant; C) the step of re-differentiating the cells to construct a transgenic plant; and D) the step of obtaining seeds from the transgenic plant.